

## High Energy Physics - Phenomenology

# Lineshapes for composite particles with unstable constituents

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We discuss on very general grounds possible lineshapes of composite particles with one unstable constituent. Expressions are derived in a coupled channel formalism for constituents interacting in an  $SS\bar{S}$ -wave with no assumption made on the width of one of them. We show how easy-to-use formulae, already existing in the literature, emerge for narrow constituents and identify the parameter that controls the regime of their applicability.

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